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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/690,446	10/21/2003	Jie Liang	TI-36057	3703
23494	7590	01/28/2008		
TEXAS INSTRUMENTS INCORPORATED			EXAMINER.	
P O BOX 655474, M/S 3999			TSE, YOUNG TOI	
DALLAS, TX 75265				
			ART UNIT	PAPER NUMBER
			2611	
			NOTIFICATION DATE	DELIVERY MODE
			01/28/2008	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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## Office Action Summary

Application No.

10/690,446

Applicant(s)

LIANG, JIE

Examiner

YOUNG T. TSE

Art Unit

2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 14 November 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5-7, 9-15 and 17-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 7, 9-12, 15 and 17-21 is/are rejected.
- 7) ☒ Claim(s) 5, 6, 13 and 14 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments, see pages 6 and 7, filed on November 14, 2007, with respect to the rejection(s) of claim(s) 1-3, 7, 9-11, 15 and 17-21 under 35 U.S.C. 102(e) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Gorday et al. and Toman.

### ***Claim Objections***

2. Claim 21 is objected to because of the following informalities: In claim 21, line 7, "second means" should be "second decoding means". Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-3, 7, 9-11, 15 and 17-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Gorday et al. (U.S. Publication No. 2005/0074036 A1, hereinafter "Gorday").

Gorday discloses a wireless communication system in Figure 1 for frequency offset compensation. In the communication system, transceivers 102 and 104 exchange data over a wireless medium and communicate with other application devices 106, 108, 110, and 112.

Fig. 2 shows a block diagram of a transceiver 102 or 104 with a single application device 106 comprising a controller 202, a transmitter 204, a receiver 206, an interface port 208, and a frequency reference 210.

Figure 3 shows a block diagram of the transmitter 204 of the transceiver of Figure 2.

Figure 4 shows a block diagram of the receiver 206 of the transceiver of Figure 2.

Figure 5 applies to a broadcast scenario in which a primary communication device, like a transmitter, is sending data packets to multiple secondary communication devices.

Figure 6 shows a possible Frequency Synchronization Burst (FSB) format for the IEEE 802.15.4 standard which contains a preamble 602, a start-of-frame delimiter 604, and a header 606.

Regarding claims 1, 10, 18 and 21, the wireless communication system or transceiver comprises the controller 202 controls the receiver 206 having a first receiver path or front end (a low power sleep mode) for decoding a preamble to a wireless data

packet and a second receiver path or front end (active mode) for decoding a data packet payload, the controller 202 also functions as a packet detection logic to identify data packets directed to the receiver and functions as a switching logic to select the first receiver path (or the first front end) or the second receiver path (or the second front end) depending on whether the data packet has identified a data packet directed to the receiver, wherein the low power sleep mode has a lower decoding resolution than the active mode since the preamble or FSB is a small data packet containing the information about its relative position with respect to the associated payload data packets. See paragraphs [0013]; [0036]; [0041]; [0051]; [0053]; [0055]; [0057]; and [0059], last 5 lines.

Regarding claim 2, clearly, the second receiver path (active mode) is separate from the first receiver path (low power sleep mode).

Regarding claims 3, 11 and 20, clearly, the first receiver path or front end (low power sleep mode) requires less power to operate than the second receiver path or front end (active mode).

Regarding claims 7 and 15, although Gorday does not explicitly teach the first receiver path uses a specific barker-code detection to decode the preamble of the data packet, it is well known to a person skill in the to know any kind of coding detection could be used to decode the preamble of the data packer, including the barker-code detection since a barker code is one of many coding techniques. It also described in paragraph [0014] of the prior art Figure 1 of the instant application.

Regarding claims 9 and 17, the controller 202 also functions to select the low power sleep mode until a data packet is identified and then select the active mode to decode the data packet payload.

Regarding claim 19, the controller 202 switches back to the low power sleep mode when receiving of the data packet payload is completed.

### ***Allowable Subject Matter***

5. Claims 5-6 and 13-14 would be allowable if rewritten to overcome the objection(s) set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

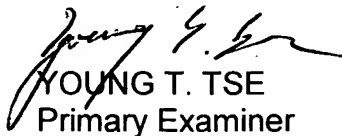
Chen et al. relates to a receiver 20 has a first selector 22 which routes a received signal to one of two paths. The first selector 22 connects the first path (mode 1) during preamble processing and connects the second path (mode 2) when decoding the received complementary code key symbols.

Liang et al. relates to a forward error correction (FEC) decision-making apparatus comprises a selector determines whether to send the physical layer service data unit (PSDU) to a data path for regular media access control (MAC) processing or to a data path for MAC processing with FEC.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to YOUNG T. TSE whose telephone number is (571) 272-3051. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad H. Ghayour can be reached on (571) 272-3021. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
YOUNG T. TSE  
Primary Examiner  
Art Unit 2611